

# SENSOR WITH IMPROVED STABILIZATION AND TRACK DEFINITION

## ABSTRACT

A magnetic head having a free layer structure having at least three layers. First and second free layers have magnetic moments that are pinned antiparallel each other. A third free layer, closer to the second free layer than the first free layer, has a magnetic moment oriented parallel to the magnetic moment of the second free layer. Ends of the third free layer define track edges of the third free layer. The first and second free layers extend beyond the track edges in a direction parallel to the ABS.